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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,639	02/19/2002	Ernie L. Woosley	195805-00046	5263
3705	7590	02/26/2004	EXAMINER	
ECKERT SEAMANS CHERIN & MELLOTT 600 GRANT STREET 44TH FLOOR PITTSBURGH, PA 15219			GHATT, DAVE A	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/078,639	Applicant(s) WOOSLEY ET AL.	
	Examiner Dave A Ghatt	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 11,24,36,49 and 61 is/are allowed.
6) ☒ Claim(s) 1-8,12-21,25-33,37-46,50-58 and 62-73 is/are rejected.
7) ☒ Claim(s) 9,10,22,23,34,35,47,48,59 and 60 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 19 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 12-21, 25-33, 37-46, 50-58, 62-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Takai et al. (US 4,993,659). Insofar as structure is recited, Takai et al. teaches the claimed apparatus. With respect to independent claims 1, 13, 15, and 51 Takai et al. teaches a hub 5 for use with a spool having a quantity of material wrapped thereon, the material having a number of known characteristics. As illustrated in Figures 2 and 3, the hub 5 comprising a core 6 with a central axis (not numbered) structured to be disposed on the spool. Figure 3 of Takai et al. shows indication members (A, B, C) including as support (shown in Figure 3 at the middle section around which the tabs are mounted, and generally illustrated at the lower section of 5 in Figure 2), at least a first tab A, and a second tab B, the at least first tab A being an at least home tab and defining a home position of the indicating member, the second tab B being a characteristic tab. Figure 2 shows the support mounted on the core 6. Figures 2 and 3 also illustrate the at least first and second tabs (A, B) disposed on the support. Figures 2 and 3 also illustrate the at least first and second tabs (A, B) including an elongated dimension that extends in a generally radial direction with respect to the central axis of the core, the second tab B being oriented at one of a plurality of known angles with respect to the at least first tab. (See

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column 6 lines 22-32.) Takai et al. also teaches the requirement for the orientation of the second tab with respect to the at least first home tab to correspond with characteristics of the material.

As outlined in column 1 lines 25-38, and in column 3 lines 1-44, Takai et al. teaches the material twining characteristic, by detecting signals based on the rotation and orientation of the tabs with respect to each other.

With respect to claims 2, 14, and 52, Figures 2 and 3 of Takai et al. teach a generally flat indication members (A, B, C) and the support (around which the tabs are mounted) and the at least first tab, and the second tab being generally coplanar.

With respect to claims 3, 4, 16, 17, and 53, as outlined above, Figures 2 and 3 show the indication members being a monolithically-formed single-piece member. Figure 3 also shows the arcuate support member (around which the tabs are mounted) extending between the at least first and second tabs.

With respect to claims 5, 6, 7, 8, 18, 19, 20, 21, 54, 55, 56, 57, and 58, Takai et al. teaches the claimed structure. Figures 2 and 3 shows an elongated arcuate (ring shaped) support area, extending from hub section 5, and the support tabs extending generally perpendicularly away from the support. Figure 3 also shows the tabs (A, B, C) extending from the support in directions toward and away from the central axis.

With respect to claims 12, 25, and 64, column 2 lines 12-17 of Takai et al. teach a magnetic sensing arrangement which must involve at least a partially metallic indication member.

With respect to claims 62 and 63, and the broad requirement for the core to formed of a material having a color that corresponds with the orientation of the second tab with respect to the

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at least first tab, the applicant should note that the core of Takai et al. meets this limitation because the core must have a color which *corresponds* in some manner to the orientation of the second tab with respect to the first. This requirement does not require any change in color of the core.

With respect to independent claims 26, 38, and 65 (and claims depending therefrom), Takai et al. teaches a detectable spool 5 for use in a printer, the spool 5 including a central axis (not numbered) being structured to have a quantity of material wrapped thereon, the material having a number of known characteristics. Figure 3 of Takai et al. shows indication means (A, B, C, 11) disposed on the spool 5, the indication means (A, B, C, 11) including an indication member (A, B, C). Takai et al. also the indication member (A, B, C) including a support (shown in Figure 3 at the middle section around which the members are mounted, and generally illustrated at the lower section of 5 in Figure 2). Figures 2 and 3 also illustrate the at least first and second tabs (A, B) including an elongated dimension that extends in a generally radial direction with respect to the central axis. Takai et al. also teaches the at least first tab A being an at least home tab and defining a home position of the indicating member, the second tab B being a characteristic tab, the second tab B being oriented at one of a plurality of known angles with respect to the at least first tab. (See column 6 lines 22-32.) Takai et al. also teaches the requirement for the orientation of the second tab with respect to the at least first home tab to correspond with characteristics of the material. As outlined in column 1 lines 25-38, and in column 3 lines 1-44, Takai et al. teaches the material twining characteristic, by detecting signals based on the rotation and orientation of the tabs with respect to each other.

With respect to claims 27, 39, and 66, Figures 2 and 3 of Takai et al. teach a generally flat indication members (A, B, C) and the support (around which the tabs are mounted) and the at least first tab, and the second tab being generally coplanar.

With respect to claims 28, 29, 41, 42, and 67, as outlined above, Figures 2 and 3 show the indication members being a monolithically-formed single-piece member. Figure 3 also shows the arcuate support member (around which the tabs are mounted) extending between the at least first and second tabs.

With respect to claims 30, 31, 32, 33, 43, 44, 45, 46, 68, 69, 70, 71, and 72, Takai et al. teaches the claimed structure. Figures 2 and 3 shows an elongated arcuate (ring shaped) support area, extending from spool section 5, and the support tabs extending generally perpendicularly away from the support. Figure 3 also shows the tabs (A, B, C) extending from the support in directions toward and away from the central axis.

With respect to claims, 37, 40, 50, 73, column 2 lines 12-17 of Takai et al. teach a magnetic sensing arrangement which must involve at least a partially metallic indication member.

Allowable Subject Matter

3. Claims 11, 24, 36, 49, and 61 are allowed.
4. Claims are 9, 10, 22, 23, 34, 35, 47, 48, 59, and 60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including a first support portion and a second support portion that are separated from each other.

Claim 10 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including the support substantially embedded in the core.

Claim 22 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including a first support portion and a second support portion that are separated from each other.

Claim 23 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including the support substantially embedded in the core.

Claim 34 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including a first support portion and a second support portion that are separated from each other.

Claim 35 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including the support being substantially embedded in the core.

Claim 47 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including a first support portion and a second support portion that are separated from each other.

Claim 48 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including the support being substantially embedded in the core.

Claim 59 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including a first support portion and a second support portion that are separated from each other.

Claim 60 is indicated as having allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including the support being substantially embedded in the core.

Examiner's Comments

5. The examiner considered the arguments and changes in the amendment filed December 1, 2003. In view of the amendments the rejections under 112, 2nd paragraph have been withdrawn. Also, in view of the amendments and the remarks, the prior art rejections under Lessard et al. (US 6,199,786) and Barwick (US 4,111,378) have been withdrawn. The examiner has added rejections under Takai et al. (US 4,993,659), which was listed on the original PTO 892.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave A Ghatt whose telephone number is (571) 272-2165. The examiner can normally be reached on Mondays through Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

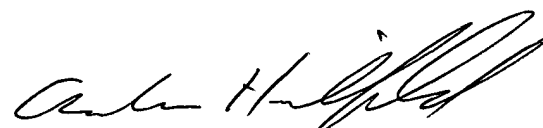
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DAG



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